

## CLAIMS

What is claimed is:

1. An adapter for use in dispensing or withdrawing fluid from a container using a syringe, the adapter comprising:
  - a main body having a rim formed at least partially around said main body and a collar extending from said main body adjacent said rim;
  - at least one aperture formed through said main body from an upper portion of said main body to a lower portion of said main body; and
  - wherein said main body is adapted to be positioned on an open top of the container such that said rim at least partially engages an edge of the open top while said collar is positioned adjacent the edge and at least partially inserted into the open top.
2. The adapter of claim 1, further comprising:
  - a second aperture formed through said main body from said upper portion of said main body through said lower portion of said main body.
3. The adapter of claim 2, wherein said at least one aperture is longer than said second aperture.
4. The adapter of claim 1, wherein said aperture is linear.
5. The adapter of claim 1, wherein said aperture includes:
  - a first portion having a first cross sectional dimension;
  - at least a second portion having a second cross sectional dimension; and
  - wherein said first cross sectional dimension is greater than said second cross sectional dimension.
6. The adapter of claim 5, wherein said first cross sectional dimension is defined by a radius.
7. The adapter of claim 6, wherein said first cross sectional dimension is adapted to receive a luer of the syringe.
8. The adapter of claim 6, wherein said first cross sectional dimension is adapted to receive a needle.

9. The adapter of claim 1, wherein said aperture has a fixed cross sectional dimension along its length.
10. The adapter of claim 1, wherein said main body defines a recess for receiving a structure extending from the container.
11. The adapter of claim 1, wherein a portion of said at least one aperture extends downwardly from said main body.
12. A well and adapter for use with a syringe for dispensing liquid into or withdrawing liquid from said well, said well and adapter comprising:
  - an opening in said well defined by an edge;
  - said adapter having a main body having a rim formed at least partially around the main body, a collar extending from said main body adjacent said rim, and at least one aperture formed through said main body; and
  - said main body adapted to be positioned in said opening of said well with said rim at least partially engaging said edge and said collar at least partially inserted into said opening and positioned adjacent said edge.
13. The adapter of claim 12, further comprising:
  - a second aperture formed through said main body.
14. The adapter of claim 13, wherein said at least one aperture is longer than said second aperture.
15. The adapter of claim 12, wherein:
  - said at least one aperture is linear.
16. The adapter of claim 12, wherein:
  - said at least one aperture has a first portion having a first cross sectional dimension;
  - and
  - at least a second portion having a second cross sectional dimension; and
  - wherein said first cross sectional dimension is greater than said second cross sectional dimension.

17. The adapter of claim 16, wherein said first cross sectional dimension is defined by a radius.
18. The adapter of claim 16, wherein said first cross sectional dimension is sized sufficiently to receive a luer of the syringe.
19. The adapter of claim 16, wherein said first cross sectional dimension is sized sufficiently to receive a needle of the syringe.
20. The adapter of claim 12, wherein said pathway has a fixed cross sectional dimension along its length.
21. The adapter of claim 12, wherein said main body defines a recess for receiving a structure extending out of said well.
22. The adapter of claim 12, wherein a portion of said pathway extends downwardly from said main body and into said well.
23. An adapter for use in dispensing or withdrawing fluid from a container using a syringe, the adapter comprising:
  - a main body having a rim formed at least partially around said main body and a collar extending from said main body adjacent said rim;
  - at least fluid guide formed through said main body from an upper portion of said main body to a lower portion of said main body, said at least one fluid guide adapted to receive a portion of the syringe; and
  - wherein said rim is adapted to at least partially engage an edge of an open top of the container while said collar is positioned adjacent the edge and at least partially inserted into the open top.
24. The adapter of claim 23, further comprising a tubular protrusion extending from said main body.
25. The adapter of claim 24, wherein said tubular protrusion includes an angled terminal end structure.

26. The adapter of claim 24, wherein said tubular protrusion includes terminal end structure having a crisscross pattern formed therein.
27. The adapter of claim 23, further comprising a plate extending from said main body.
28. The adapter of claim 23, further comprising an orientation structure connected with said plate.
29. The adapter of claim 28, wherein said orientation structure includes three tabs extending from said plate and adapted to engage an upper surface of the container.